NorCal Engineering

Soils and Geotechnical Consultants
10641 Humbolt Street Los Alamitos, CA 90720
(562) 799-9469 Fax (562) 799-9459

April 7, 2003

Project Number 5936-96B
City LA Log No.: 39542

City of Los Angeles
Department of Building and Safety
201 North Figueroa, 3rd Floor
Los Angeles, California 90012

Attn: Mr. Markus Levias

RE: **Response to City of Los Angeles Compaction Report Correction List** – 1414 West 190th Street, in the City of Los Angeles, California (Tract: Rancho San Pedro, Lot: Maria De Los Reyes Dominguez)

Dear Mr. Levias:
The following is in response to the above referenced Compaction Report Correction List (attached). Items are addressed in the same order in which they appear on the review sheet, for clarity.

Item 1
Address and legal description are included above and on the Certificate of Compliance.

Item 18
Certificate of Compliance attached.

Item 20
Soil types with similar or exact descriptions may vary in unit weight and moisture contents. Colors of the soils also may be very similar while other properties can vary. Color descriptions have been added to the attached revised Table I.

Item 21
Test numbers 400A and 458A were transposed with their corresponding tests 400 and 458. The tests with the "A" represent the retest of a previous failing test. The corrected test pages are attached for your review.

We appreciate this opportunity to be of service to you. If you have any further questions, please do not hesitate to contact the undersigned.

Respectfully submitted,
NORCAL ENGINEERING

Keith D. Tucker
Project Engineer
R.G.E. 841

Mark A. Burkholder
Project Manager

NorCal Engineering

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CITY OF LOS ANGELES

DEPARTMENT OF BUILDING AND SAFETY

ENGINEER'S CERTIFICATE OF COMPLIANCE FOR COMPACTED EARTH FILLS

JOB ADDRESS: 1414 West 190th Street, Los Angeles

LEGAL DESCRIPTION: Tract: Rancho San Pedro

LOT: Maria De Los Reyes Dominguez

CITY LA LOG NO.: 39542

SOIL TESTING AGENCY: NorCal Engineering

PROPERTY OWNER'S NAME: Boeing Realty Corporation

OWNER'S ADDRESS: 3760 Kilroy Airport Way, Suite 500

PER REPORTS ON OUR PROJECT NUMBER: 5936-96B

DATE OF WORK STARTED ON PROJECT: 2/3/01

DATE FILL WAS COMPLETED: 3/15/02

DATE OF THIS CERTIFICATE: 5/8/02

TO THE SUPERINTENDENT OF BUILDING:

I hereby certify that I have personally inspected and tested the placing of compacted earth fill on the above described property, and on the basis of these inspections and tests it is my opinion that the same was placed in conformity with the requirements of the Los Angeles City Building Code.

Keith D. Tucker
R.G.E. 841

REGISTERED PROFESSIONAL ENGINEER
KEITH D. TUCKER
No. 841
Exp. 12/31/04
GEOTECHNICAL
STATE OF CALIFORNIA

*For the purpose of this certificate, to have "personally inspected and tested" shall include inspection and testing performed by any person responsible to the licensed engineer signing this certificate. Where the inspection and testing of all or part of the work above is delegated, full responsibility shall be assumed by the licensed engineer whose signature is affixed thereon.

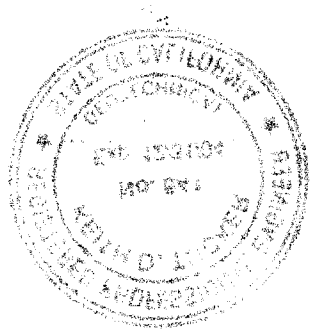

TABLE I
MAXIMUM DENSITY TESTS
(ASTM: D1557-00)

Sample	Classification	Optimum Moisture	Maximum Dry Density (lbs./cu.ft.)
I	Brown, SAND fine to medium grained silty, slightly clayey	11.0	123.0
II	Light Brown, SAND, silty clayey	11.0	125.0
III	Dark Brown, Silty CLAY with trace of gravel	12.5	121.0
IV	Brown, Slightly silty clayey SAND	12.0	122.0
V	Tan, SAND fine to medium grained silty slightly clayey	10.5	128.0
VI	Reddish brown, CLAY sandy	12.0	117.5
VII	Grey-brown, SAND fine to medium grained silty	11.5	121.5
VIII	Grey, Clayey SILT with gravel	10.5	116.0
IX	Brown, SAND fine to medium grained silty	11.0	112.0
X	Brown, Clayey silty SAND	14.0	111.0
XI	Dark brown, Clay silty SAND	12.5	115.0
XII	Grey-brown, Silty CLAY fine to medium grained, SAND	9.5	122.5
XIII	Grey-brown, Clayey SILT with gravel	11.5	119.5
XIV	Grey, Clayey SILT	14.0	118.0
XV	Dark grey, Silty CLAY	13.0	112.0
XVI	Reddish brown, SAND clayey	11.5	123.0
XVII	Olive brown, CLAY sandy	13.0	120.0
XVIII	Grey-brown, Crushed Miscellaneous Base	8.0	128.0

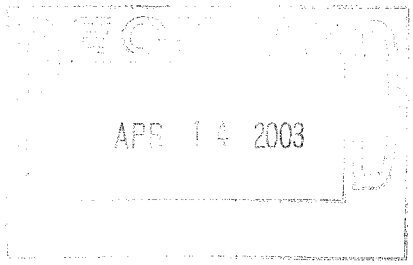
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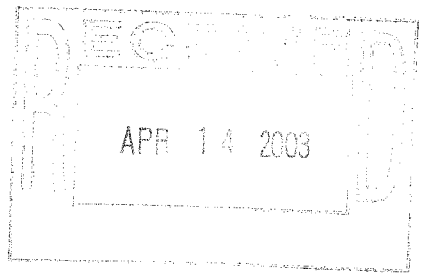
TABLE I
MAXIMUM DENSITY TESTS
(ASTM: D1557-00)

Sample	Classification	Optimum Moisture	Maximum Dry Density (lbs./cu.ft.)
XIX	Grey-brown, Silty CLAY	12.5	120.5
XX	Grey, CLAY	14.5	115.0
XXI	Grey-brown, Crushed Miscellaneous Base	9.5	126.5
XXII	Reddish brown, SAND fine to medium grained, clayey	11.0	120.0
XXIII	Brown, Sandy CLAY	14.0	118.0
XXIV	Dark brown, Silty sandy CLAY	13.5	118.5
XXV	Grey-brown, Clayey SILT	13.0	119.0
XXVI	Tan, SAND fine to coarse grained, slightly silty	10.5	125.0
XXVII	Light brown, SAND fine to medium grained, silty	9.5	118.0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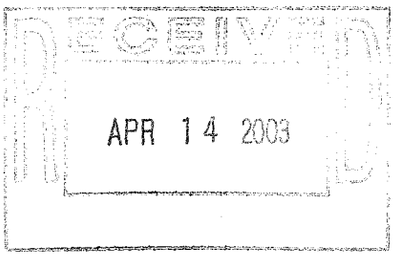
SUMMARY OF COMPACTION TEST RESULTS

Date of Test	Test No.	Location	Depth	Percent Moisture	Unit Wt. lbs./cu.ft.	Relative Compaction	Soil Type	Test S/D
5/25/01	375	Site Grading	3.0-3.5	11.8	110.9	92	XI	S
5/29/01	376	Site Grading	2.0-2.5	12.2	104.6	91	III	S
5/29/01	377	Site Grading	1.0-1.5	11.9	106.2	92	XIV	D
5/29/01	378	Site Grading	4.0-4.5	13.1	105.6	92	XI	D
5/29/01	379	Site Grading	3.5-4.0	12.4	103.8	90	XI	S
5/29/01	380	Site Grading	3.0-3.5	14.8	99.2	86	XI	D
5/29/01	380A**	Site Grading	3.0-3.5	12.7	105.3	92	XI	D
5/29/01	381	Site Grading	2.0-2.5	14.1	109.9	93	XIV	D
5/29/01	382	Site Grading	2.5-3.0	12.8	110.4	91	III	S
5/29/01	383	Site Grading	2.5-3.0	13.6	111.5	92	III	S
5/29/01	384	Site Grading	2.0-2.5	11.9	113.4	91	II	D
5/29/01	385	Site Grading	5.0-5.5	13.2	106.4	90	XIV	D
5/29/01	386	Site Grading	4.0-4.5	13.3	103.7	90	XI	S
5/29/01	387	Site Grading	3.0-3.5	12.6	105.3	92	XI	D
5/29/01	388	Site Grading	3.5-4.0	13.7	107.6	91	XIV	D
5/29/01	389	Site Grading	3.0-3.5	14.2	107.3	91	XIV	D
5/29/01	390	Site Grading	2.5-3.0	13.1	109.2	90	III	S
5/29/01	391	Site Grading	2.5-3.0	13.6	110.9	92	III	S
5/29/01	392	Site Grading	2.0-2.5	13.2	107.1	93	XI	D
5/30/01	393	Site Grading	0.0-0.5	12.1	115.0	94	XIV	D
5/31/01	394	Excavation Bkfl.	27.0-27.5	12.5	111.7	91	I	S
5/31/01	395	Excavation Bkfl.	25.5-26.0	12.8	111.4	92	III	S
5/31/01	396	Excavation Bkfl.	24.0-24.5	13.1	110.8	92	III	S
5/31/01	397	Excavation Bkfl.	22.0-22.5	12.3	112.7	90	II	D
5/31/01	398	Excavation Bkfl.	20.5-21.0	11.9	113.6	91	II	S
5/31/01	399	Excavation Bkfl.	19.0-19.5	13.2	109.2	93	XIV	D
6/1/01	400	Excavation Bkfl.	17.5-18.0	17.1	102.4	87	XIV	D
6/1/01	400A**	Excavation Bkfl.	17.5-18.0	13.7	108.5	92	XIV	D
6/1/01	401	Excavation Bkfl.	16.0-16.5	15.8	109.5	93	XIV	S
6/1/01	402	Excavation Bkfl.	15.0-15.5	13.2	104.9	91	XI	D
6/1/01	403	Excavation Bkfl.	13.0-13.5	12.2	112.6	92	IV	D
6/1/01	404	Excavation Bkfl.	11.5-12.0	12.7	112.9	93	IV	D

**Retest of failing tests after area reworked
S= Sand Cone Method
D= Drive Tube Method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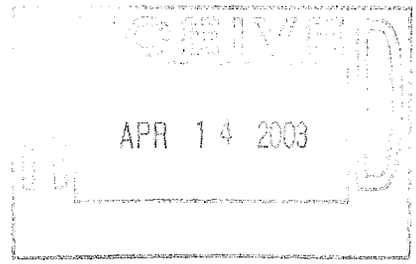
SUMMARY OF COMPACTION TEST RESULTS

Date of Test	Test No.	Location	Depth	Percent Moisture	Unit Wt. lbs./cu.ft.	Relative Compaction	Soil Type	Test S/D
6/6/01	436	Excavation Bkfl.	10.0-10.5	13.1	113.6	94	III	S
6/6/01	437	Excavation Bkfl.	8.0-8.5	12.6	113.9	91	II	S
6/7/01	438	Site Grading	6.0-6.5	15.2	112.1	95	XIV	D
6/7/01	439	Site Grading	6.0-6.5	15.4	112.6	95	XIV	D
6/7/01	440	Site Grading	5.5-6.0	13.9	114.0	96	XIV	D
6/7/01	441	Site Grading	5.0-5.5	14.5	112.3	95	XIV	S
6/7/01	442	Site Grading	4.5-5.0	14.2	110.1	93	XIV	D
6/7/01	443	Site Grading	5.0-5.5	13.7	107.6	91	XIV	D
6/8/01	444	Site Grading	7.0-7.5	12.1	112.2	91	I	S
6/8/01	445	Site Grading	7.0-7.5	11.8	118.2	93	V	D
6/8/01	446	Site Grading	6.0-6.5	14.9	114.7	97	XIV	D
6/8/01	447	Site Grading	4.0-4.5	14.8	114.1	96	XIV	D
6/8/01	448	Site Grading	5.0-5.5	12.1	119.5	93	V	S
6/8/01	449	Site Grading	3.0-3.5	13.7	111.6	94	XIV	S
6/8/01	450	Site Grading	3.0-3.5	11.7	115.7	90	V	D
6/8/01	451	Site Grading	3.0-3.5	13.4	113.6	96	XIV	D
6/8/01	452	Site Grading	3.0-3.5	13.8	114.9	97	XIV	D
6/11/01	453	Site Grading	5.0-5.5	13.2	108.8	92	XIV	S
6/11/01	454	Site Grading	5.0-5.5	12.8	103.6	90	XI	D
6/11/01	455	Site Grading	4.0-4.5	13.5	101.3	91	X	D
6/11/01	456	Site Grading	4.0-4.5	13.8	103.0	93	X	D
6/11/01	457	Site Grading	3.0-3.5	13.2	107.6	91	XIV	S
6/11/01	458	Site Grading	3.5-4.0	16.3	96.4	87	X	D
6/11/01	458A**	Site Grading	3.5-4.0	13.8	100.3	90	X	D
6/11/01	459	Site Grading	3.0-3.5	11.2	118.9	98	III	S
6/11/01	460	Site Grading	2.0-2.5	10.1	103.5	88	XIV	D
6/11/01	460A**	Site Grading	2.0-2.5	14.3	107.6	91	XIV	D
6/11/01	461	Site Grading	2.0-2.5	13.7	113.4	96	XIV	D
6/12/01	462	Site Grading	2.0-2.5	14.7	113.1	96	XIV	D
6/12/01	463	Site Grading	2.0-2.5	14.9	111.3	94	XIV	S
6/12/01	464	Site Grading	4.0-4.5	13.5	112.7	96	XIV	D
6/12/01	465	Site Grading	4.5-5.0	14.4	101.2	91	X	D

**Retest of failing tests after area reworked
S= Sand Cone Method
D= Drive Tube Method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City of Los Angeles
COMPACTION REPORT CORRECTION LIST

LA DBS
DEPARTMENT OF BUILDING AND SAFETY

LOG#: 39542 **DATE: 4/7/03** **COMPACTION FILE - 5**

JOB ADDRESS: 1414 W. 190th Street **DISTRICT OFFICE** WLA

TRACT: Rancho San Pedro **COUNTY REF. #:**

BLOCK: **PERMIT #:** 98030-10000-00177

LOT: Maria De Los Reyes Dominguez **ARB:**

CURRENT REPORT: Norcal Engineering **DATED:** 3/8/02

OVERSIZED DOCUMENTS: Yes **X-REF:** 5x **DATED:** May 2002

PREVIOUS REPORT: **DATED:**

PROJECT DESCRIPTION/COMMENTS: Geotechnical Observation and Testing of Rough Grading Operations

REVIEWED BY MARCUS LEVIAS **TELEPHONE** 213/482-0487

DAVID HSU - CHIEF OF GRADING SECTION

The compaction report(s) have been reviewed by the Grading Section of the Department and you are advised that the approval of the report(s) is withheld for the reasons hereinafter set forth. The approval of the reports will not permit the violation of any section of the Building Code, or other local ordinance or state law.

NOTE: Numbers in parenthesis ( ) refer to Code sections of the 1998 edition of the California Building Code, Information Bulletin (P/BC).

INSTRUCTIONS

- Corrections with circled item numbers apply to this report review.
- Submit three copies of the report to the grading section. At least one copy of the report shall be an original with wet signatures.
- Call for an appointment with the report reviewer(s) to submit the report? ☐ YES ☐ NO

1. Address and legal description of the site, and the grading permit under which the work is authorized. (Address and legal description of the report, Certificate of Compliance, and grading permit shall be the same.)

2. Plot plan with:
   a) north arrow & scale;
   b) showing location limits of fill;
   c) showing depth of fill;
   d) location of in-place density tests;
   e) location of retaining walls and their subdrains;
   f) property boundaries; and streets;
   g) building footprints and adjacent structures/sidewalks, etc.;
   h) toe and top of slopes;
   i) subsurface cross sections required at _____.

3. Statement that inspection and approval by the soils engineer of:
   a) the bottom of excavation before placing the fill;
   b.)subdrains before placing gravel backfill.

   (108.9 and 7011.3)

4. Statement of purpose and use of fill: (primary structural for supporting footings, secondary structural for supporting walkways/paving, non-structural for landscaping, etc.)

Log#:

5. Description of each of the following:
   a) Materials encountered at the bottom of the excavation;
   b) Preparation of the bottom prior to placement of fill;
   c) Fill/backfill placement, and preparation;
   d) Method of mechanical compaction;
   e) Identify fill material used with Unified Soil Classification System, maximum dry density, and optimum moisture;
   f) Moisture content control method and results;
   g) Thickness of the uncompacted fill lifts (typically 6-8 inches).

6. Results of all density tests with applicable ASTM or UBC standard designation numbers, compaction standard, and depths.

7. _____ is not on the list of City-Approved Soil Testing Laboratories. Call the Department's Materials Control Division (213)977-6907 for information on licensing procedures. (P/BC 2001-58)

8. Soils engineer may employ a City Approved Laboratory to perform the testing, if the Department is provided with: a letter of responsibility, stating that the soils engineer concurs with the test data and results, and accepts responsibility for using it. A copy of the laboratory report signed and stamped by the laboratory engineer shall also be provided.

9. Field tests should be taken at every two vertical feet or for every 500 cubic yards of fill placed, whichever is more restrictive.

10. Test results showing less than required relative compaction (90%, 92%, 95%, or higher percentage if recommended to, and approved, by the Department) are not acceptable.

11. Description of removal and recompaction of the unacceptable fill and its retesting shall be included.

12. Statement that nuclear testing was performed in conformance with P/BC 2001-28.

13. At least one sandcone test (A.S.T.M. 1556) shall be taken for each five nuclear tests (A.S.T.M. 2922 and 3017).

14. Recommended bearing capacities and minimum embedments of footings in compacted fill (primary structural fill).

15. Expansion index testing shall be provided or recommendations for special design for highly expansive soil (supporting material is Class of Material No.5 in Table 18-I-A).

16. Where design values exceed those shown in Table 18-1-A and are not justified by an approved soils investigation report, additional tests for maximum dry density, moisture content, direct shear tests, and consolidation may be required. Where support may be provided by import materials additional tests may be required.

17. As-built subsurface cross sections and shear test results conducted on undisturbed samples taken during grading for buttress fills and slopes steeper than 2:1.

18. A Certificate of Compliance that is completed, signed, and sealed by the Soils Engineer (correct address and legal description shall match permit).

19. Attach a copy of the Department Approval letter for the Soils Investigation and a single copy of the previously approved Soils Investigation Report.

20. Include explanation regarding the similarities/differences of some of the soil samples. (Table 1 of report).

21. Explain errors on test # 400A and 458A. (Summary of Compaction Test Results)

ADDITIONAL COMMENTS